Patent claims

1. A turbine blade (63, 65) with a blade leaf (67, 69) arranged along a blade axis (73, 75) and with a platform region (61), which, arranged at the foot of the blade leaf (67, 69), has a platform (71) extending transversely with respect to the blade axis (73, 75), the platform (71) being formed at least partially by first resilient elastic sheet metal part (79) fixed to a first abutment (83) arranged on the blade leaf (67, 69), characterized in that the sheet metal part (79) can be laid sealingly against the further abutment (85) arranged on an adjacent turbine blade (63, 65).

2. The turbine blade (63, 65) as claimed in claim 1, characterized in that the platform (71) comprises a second sheet metal part (77) fixed to a second abutment (81) on the other side of the blade leaf (67).

3. The turbine blade (63, 65) as claimed in claim 2, characterized in that each abutment (81, 83) is designed in the form of a groove or edge.

4. The turbine blade (63, 65) as claimed in one of claims 1 to 3, characterized in that the further abutment (85) is produced in the form of a bearing support.

5. The turbine blade (63, 65) as claimed in one of claims 1 to 4, characterized in that,

in the state of rest of the turbine blade (63, 65), the first resilient elastic sheet metal part (79) lies loosely against the further abutment (85).

6. The turbine blade (63, 65) as claimed in one of claims 1 to 5, characterized in that the first resilient elastic sheet metal part (79) lies against the further abutment (85) under a self-generated prestress.

7. The turbine blade (63, 65) as claimed in one of claims 1 to 6, characterized in that the platform region (61) has a blade foot (35, 47) as a load-bearing structure.

8. A gas turbine (1), with a flow duct (5) extending along an axis (3) having an annular cross section for a working medium (M), and a second (9, 13) blade stage arranged downstream of a first (7, 11) along the axis (3), a blade stage (7, 9, 11, 13) having a number of annularly arranged turbine blades (63, 65) as claimed in one of the preceding claims which extend radially into the flow duct (5).

9. The gas turbine (1) as claimed in claim 8, characterized in that, during the rotary operation of a turbine blade (63, 65) in the form of a moving blade (23) on an axial turbine rotor (19), a centrifugal force acting from the foot of the blade leaf in the direction (99) of the blade leaf is generated as the result of rotation, the first resilient elastic sheet metal part (79) being pressed against a further abutment (85) by means of the centrifugal force and thereby lying against the latter, fastened by centrifugal force.

10. The gas turbine (1) as claimed in claim 8, characterized in that, during the operation of a turbine blade (63, 65) in the form of a guide blade (21) on a peripheral turbine casing (15), a pressure drop from the foot of the blade leaf in the direction (99) of the blade leaf is generated by a cooling medium, the first resilient elastic sheet metal part (79) being pressed against a further abutment (85) by means of the pressure drop and thereby lying against the latter, fastened by pressure.

11. The gas turbine (1) as claimed in claim 8 to 10, characterized in that, during the operation of the turbine blade (63, 65) in the gas turbine (1), the first resilient elastic sheet metal part (79) has the function of a sealing element.

12. The gas turbine (1) as claimed in one of claims 8 to 11, characterized in that a boundary of the flow duct (5), which boundary is continuous, is formed, between a first turbine blade (63) and an adjacent second turbine blade (65) of the same blade stage (7, 9, 11, 13), by a first resilient elastic sheet metal part (79) of the first turbine blade (63) and by a second sheet metal part (77) of the second turbine blade (65).

13. The gas turbine (1) as claimed in one of claims 8 to 11, characterized in that a boundary (87) of the flow duct (5), which boundary is continuous, is formed, between a first turbine blade (63) of the first blade stage (7, 11) and a second turbine blade (65), axially adjacent to the first turbine blade (63), of the second blade stage (9, 13), by a first resilient elastic sheet metal part (79) of the first turbine blade (63) and by a second sheet metal part (77) of the second turbine blade (63).

14. The gas turbine (1) as claimed in one of claims 8 to 12, characterized in that a first resilient elastic sheet metal part (77) arranged on a first turbine blade (63) and a second sheet metal part (79) arranged on a second turbine blade (65) are held jointly at a further abutment (85) of one of the two turbine blades (63, 65).